

CONTENTS

Volume 4, Issue Nos. 1-4

THE JOURNAL OF VISUALIZATION AND COMPUTER ANIMATION

VOLUME 4, ISSUE No. 1	<i>January-March 1993</i>
Editorial	1
Visualizing Complex Biological Interactions in the Soil Ecosystem: C. M. Liddell and D. Hansen	3
NPSNET: Real-time Collision Detection and Response: M. J. Zyda, D. R. Pratt, W. D. Osborne and J. G. Monahan	13
Rolling on a Smooth Biparametric Surface: G. Hégron	25
Normal Vector Generation for Sampled Data Using Fourier Filtering: M. E. Goss and I. P. Page	33
The Same Origin Ray Set Query for Realistic Illumination: Algorithm and Analysis: A. Rappoport	51
Calendar of Events	61
 VOLUME 4, ISSUE No. 2	 <i>April-June 1993</i>
Editorial	ii
Computer Animated Visual Translation from Natural Language to Sign Language: J. Lee and T. L. Kunii	63
Physical Simulation of Land Vehicles with Obstacle Avoidance and Various Terrain Interactions: S. Jimenez, A. Luciani and O. Raoult	79
Advanced Object-oriented Methods and Concepts for Simulations of Multi-body Systems: V. Kühn and W. Müller	95
Programming Mechanical Simulations: J. K. Kearney, S. Hansen and J. F. Cremer ..	113
Calendar of Events	131

Indexed or abstracted by Cambridge Scientific Abstracts, Compuscience Database,
Geographical Abstracts: Physical Geography, GEOBASE and INSPEC

VOLUME 4, ISSUE No. 3

July–September 1993

Editorial	ii
Computation of Global Illumination in a Participating Medium by Monte Carlo Simulation: S. N. Pattanaik and S. P. Mudur	133
Sequential-goal Constraints for Computer Animation: W.-B. Liu, M.-T. Ko and R.-C. Chang	153
Animation Through Space and Time Based on a Space Deformation Model: D. Bechmann and N. Dubreuil	165
Calendar of Events	185

VOLUME 4, ISSUE No. 4

October–December 1993

Editorial	ii
<i>Illusion</i> —Creating a Mock Reality: A. Stösser, W. Leister and F. Meyer	187
A Language for the Classification and Shading of Multivariate Volume Data: T. C. Palmer, E. V. Simpson and W. M. Smith	199
Design and Animation of Volume Density Functions: D. S. Ebert	213
Building Blocks for Goal-directed Motion: C. W. A. M. van Overveld	233
Calendar of Events	251
Author Index	253
Key Word Index	254

